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Da browse

1. A method for extending script language functionality utilizing web-browser plug-in applications, with the script language for implementing scripts defining interactive applications through run-time parsing and with the script language interpreted by an interpreter having standard application programming interfaces (APIs) for enhancing the command set and widget set of the interpreter through interpreter extensions loaded at run-time, said method, implemented by a plug-in interpreter extension, comprising the steps of:
- 8 parsing a program script to locate an embed command;
  - 9 parsing the embed command to locate a source reference and
  - 10 source format information;
  - 11 fetching an embedded object referenced by said source reference;
  - 12 automatically invoking a browser-plug in application based on the
  - 13 source format information; and
  - 14 creating a child window, controlled by the plug-in interpreter
  - 15 extension, to allow said plug-in application to display and interactively manipulate said
  - 16 embedded object.
2. The method of claim 1 where said step fetching comprises:
- utilizing a standard internet protocol to fetch the object.
3. A method for extending script language functionality utilizing web-browser plug-in applications, with the script language for implementing scripts defining interactive applications through run-time parsing and with the script language interpreted by an interpreter having standard application programming interfaces (APIs) for enhancing the command set and widget set of the interpreter through interpreter extensions loaded at run-time, said method, implemented by a plug-in interpreter extension, comprising the steps of:
- 8 parsing a program script to locate an embed command;
  - 9 parsing the embed command to locate a source reference and
  - 10 source format information; and
  - 11 fetching an embedded object referenced by said source reference;

12                   simulating a web-browser plug-in API to automatically invoke a  
 13 plug-in application corresponding to said source format information; and  
 14                   creating a child window, controlled by the plug-in interpreter  
 15 extension, to allow said plug-in application to display and interactively manipulate said  
 16 embedded object.

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 4.       A computer program product comprising:  
           a computer-readable storage structure for storing plug-in-interface  
 3 extension program code for extending the functionality of a script interpreter platform by  
 4 employing web-browser plug-in applications as components within script based  
 5 programs, said program code comprising:  
 6               parsing program code for causing a computer to parse the  
 7 standard embed tag parameters to be passed as part of a scripting language command call;  
 8               program code for causing a computer to fetch data objects  
 9 referenced in "SRC" parameters standard conventions (e.g.: http or file access);  
 10              program code for causing a computer to parse script to  
 11 identify embed text formats and to automatically invoke the browser plug-in application  
 12 to display and interact with embedded objects, whereby those embedded objects and their  
 13 associated plug-in applications are treated by the scripting language platform as widgets.

1               5.       The computer program product of claim 4 where said plug-in-  
 2 interface extension program code further comprises:  
 3               program code for causing the computer to allow the plug-in  
 4 application to display and provide interactive processing of a data and/or program object  
 5 within a child window, said window which is embedded within a plug-in-interface  
 6 extension -controlled window.

1               6.       The computer program product of claim 4 where said program  
 2 code for causing a computer to fetch data objects further comprises:  
 3               program code for causing the computer to fetch data objects  
 4 utilizing internet data transfer protocols.

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7. A method, performed by a computer, for extending the functionality of a script program interpreter by employing web-browser plug-in applications as components within script based programs, said method comprising the steps of:

5 parsing standard embed tag parameters to be passed as part of a scripting language command call;  
fetching data objects referenced in "SRC" parameters standard conventions (e.g.: http or file access); and  
parsing script to identify embed text formats and to automatically  
10 invoke the browser plug-in application to display and interact with embedded objects, whereby those embedded objects and their associated plug-in applications are treated by the scripting language platform as widgets.

8. A method for extending script language functionality utilizing web-browser plug-in applications, with the script language for implementing text scripts  
15 defining interactive applications through run-time parsing and with the script language interpreted by an interpreter having standard application programming interfaces (APIs) for enhancing the command set and widget set of the interpreter through interpreter extensions loaded at run-time, said method comprising the steps of:

20 including a hypermedia-embed-text-format-mimicking command in a text script;  
parsing a text script at run-time to identify language commands;  
when said hypermedia-embed-text-format-mimicking command is identified:

25 fetching an embedded object referenced by said hypermedia-embed-text-format-mimicking command;  
invoking a plug-in interface extension of the interpreter to automatically invoke a browser plug-in application associated with the embedded object; and  
30 utilizing the associated browser plug-in to display and interact with the embedded object in a window controlled by the text script.

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